

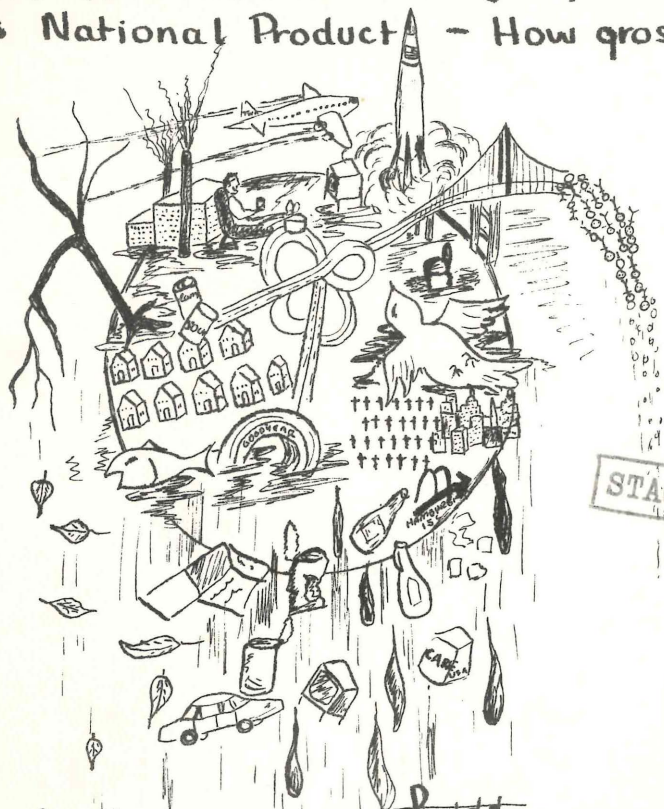
MY 5 '70

Thames
Science
Center

Naturalist notebook

STACKS

"In the beginning God created the Earth" -
God - Nature - plants - animals AND MAN?!
?@!? - plants - animals - productivity -
pollution - population (Pill, Z.P.G., P.P., C.C.S.P.P.)
- progress? - What is **PROGRESS?** - profit -
Gross National Product - How gross!



In the beginning-----
Evolution - environment - ecology - Ehrlich -
AIR - AIR - AIR - ~~WHERE~~ - WHERE - WHERE? - A.R.C. -
A.M.A. - A.E.C. - atomic - S/S/T - sonic boom -
Churcliff - survival - silence - Silent Spring -
Carson - Commoner - commonplace - garbage -
trash - paper - poachers - poverty - Paddock -
food - famine - family - future - nature -
natural - nurture - Neptune - "water, water
everywhere and not a drop to drink" - stink
- stagnation - staggering - slowly, **SLOWLY**
STRANGLING - ZZZZZZZZZZZZZZZZZZZZ EVOLUTION.

MAY
1970



NATURALIST NOTEBOOK

MAY, 1970

VOLUME VI

NO. 5

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Front Cover:

"The Environmental Crisis,"

Designed and sketched by

Martha Capizzano

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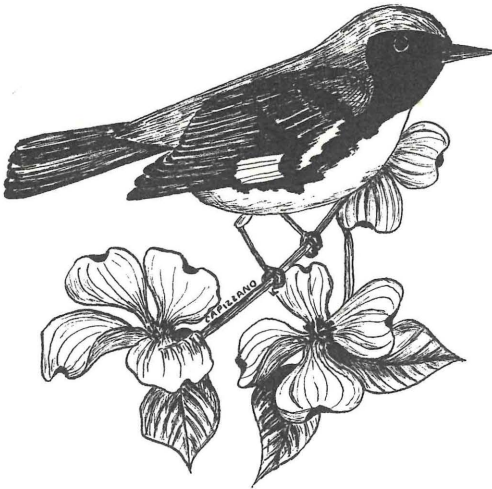
Family \$10.00 Organization \$10.00 Friend of the Center \$50.00

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MAY

The Month of WARBLERS



Black-throated Blue Warbler

May is the month of warblers. Every spring these small and beautifully colored birds move through our woodlands. Many are heading further north to nest while others will remain here for the summer. With only a few exceptions, the name "warbler" is a poor one for this group of birds. Their songs consist usually of buzzes and high pitched trills which are hardly anything one would call a warble.

To the bird watcher the warblers represent one of the most difficult groups of birds to identify for several reasons. First of all, they are very small and easily hide behind even the smallest leaves. Secondly, they often enjoy traveling along the tops of the trees making the birder crane his neck back to try to see them. After doing this for a while it often results in an aching neck referred to as "warbler's neck" by many birders. The third problem is that they are constantly in motion. One no sooner has his binoculars focused on one and, zip, it's off to another branch. Lastly, unlike the 6 kinds of swallows, or 5 wrens, or even 10 sparrows we regularly encounter, there are 28 different kinds of warblers that can be expected here during May.

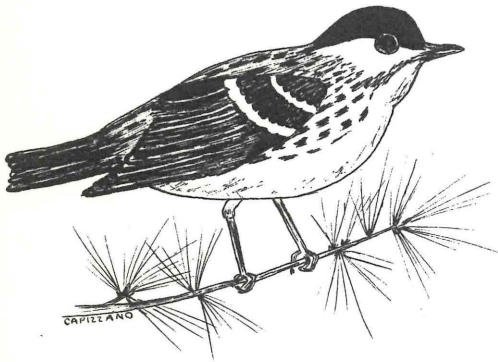
May is the major month to see these birds with the end of the second week and beginning of the third as the best time. Arm yourself with a good field guide (Peterson's

Field Guide to the Birds of Robbins, Bruun and Zim's Birds of North America), binoculars, and patience and strike out. The warblers will be most active from dawn to about 10:00 A.M. and then again from 5:00 P.M. until dark. Avoid areas where the sun has not penetrated and stick to wooded edges in full sunlight. The warm sun results in insect activity and thus the warblers are concentrated here in search of food.



Magnolia Warbler

One cannot expect to learn all the warblers in one spring let alone on one trip so do not be discouraged if far more get away than are identified. This is where the fun lies . . . looking for the tough ones.



Blackpoll Warbler

Next month in this column I will discuss the resident warblers to look for. Starting with these dozen or so that are present all summer will give you a sizeable number of the family learned by the time the migrants return.

Even if you do not know the names, a close look at some of these brilliantly colored birds is always remembered so try to look for some this spring.

MAY'S CALENDAR

May is the month of beautiful days filled with bird songs.

May 1... The Baltimore oriole greets May Day.

May 2... Common terns return to our shoreline.

May 6... Bellwort flowers in our woodlands.

May 8... Apple blossoms add a sweet smell to the air.

May 10... The brilliant male scarlet tanager sings from treetops.

May 11... Columbine flowers along rocky ledges.

May 13... One of our commonest summer residents, the red-eyed vireo, arrives.

May 14... The first sizeable flocks of migrant warblers are noted.

May 16... Azaleas are in flower.

May 17... Pink ladyslippers flower on wooded hillsides.

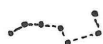
May 19... Wood pewees arrive.

May 20... The full Flower moon rises.

May 24... The longest twilights are now through July 23rd.

May 28... Tree frogs call in the evening.

May 30... Nighthawks are migrating overhead in the evening.



FOOTNOTES TO NATURE

by MARY JEAN DEWIRE



THE PINK LADYSLIPPER

The pink ladyslipper is perhaps the most beautiful wildflower to grow in Connecticut's woodlands. At one time it was the commonest orchid but now due to man's interference again, it is among the rarest.

A member of the orchid family, the ladyslipper or "moccasin flower", gets its name from the inflated lip of the flower which forms a pouch-like structure supposed to resemble a shoe. The plant also has broad leaves and the large, showy, usually solitary flower can be pink, yellow or white. It loves the deep woods or a rocky, sandy place as far away as possible from people.

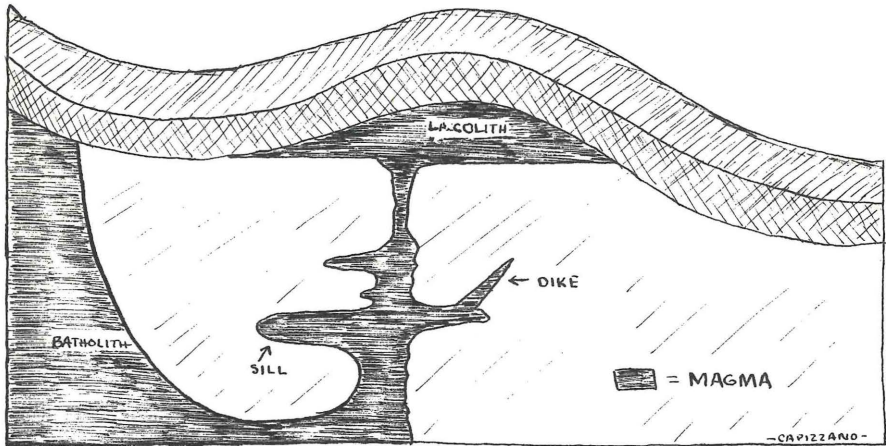
Due to a complex cross-pollination system and very slow growth, the flower will, in most instances, never blossom again once it has been picked. Unfortunately, many people do not realize this and happily pick a ladyslipper whenever they find one growing in the woods. As a result of over-picking, the ladyslipper is now quite rare in many areas where it was once abundant.

If you would like to look for this lovely flower, now is the time to take your walk in the woods as the ladyslipper blooms from mid-May to early June. Should you be lucky to find one, be sure to leave it there for others to enjoy.



ROCK HOUNDS

by JERRY THEILER



VULCANISM

Vulcanism, or the action of volcanoes, doesn't always break the surface of the earth. Many lava formations form beneath the earth's surface to be exposed later by weathering, erosion, or man's excavations.

Huge bodies of magma (lava beneath the earth's surface) form batholiths. Sometimes these cover hundreds of square miles. Laccoliths often push up the earth's surface to form a mountain even though no lava reaches the surface.

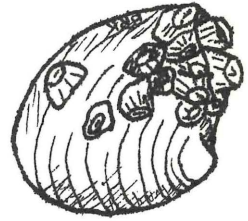
Other small bodies of lava often follow the bedrock of the area. These are called sills. Dikes are formed like sills, but cut across the bedrock of the area. Neither of these break through the surface like a regular volcano.

ALONG THE SHORE

by BARBARA KASHANSKI

THE ROCK BARNACLE

With the return of longer days and warm weather it's time to visit the seashore again. Almost anyone who has been to the shore knows the familiar little barnacle that covers rocks, pier pilings and even shells of other salt water animals. Did you know that barnacles are cousins of the lobster and crabs which are crustaceans?



There are two types of barnacles: the gooseneck and the acorn shell. Our most common barnacle, the rock barnacle, belongs to the acorn-shelled group and can be found in large numbers between the high and low tide marks.

The grayish rock barnacle is covered by a cone shaped shell which makes it look like a small volcano. The shell is made up of 6 heavy plates and is fastened together by thinner pieces of shell. At the top of the cone shell there's a "door" called an operculum and it's made up of 4 small pieces of shell. When the tide is high and the barnacle is covered with water, the barnacle opens the operculum so it can feed on the small plankton and detritus in the water. The rock barnacle feeds in rather an unusual way. Inside the shell the barnacle is lying on its back and when it's time to eat it sticks its feathery legs out the door and fans them back and forth which creates small currents which brings the food to the reclining barnacle. At low tide the operculum is closed, and with the door closed, the little barnacle can withstand long periods without water. The barnacle not only closes its

door to protect itself from drying out, but it closes when an enemy approaches. The main enemies of a barnacle are starfish and snails, but there are some fish and birds that like barnacles on their dinner menu.



Barnacles lay eggs which stay inside the shell until they hatch into tiny little larvae no bigger than the head of a pin. The larvae is called a nauplius when it first hatches and it swims away to fend for itself. The nauplius is a strange little animal with one eye, 3 pairs of legs and a single shell. After several molts and sheddings, the young barnacle has 2 eyes, 2 shells and 6 pairs of legs. It is then called a cypris larva and is ready to find a permanent home. When it finds the right spot they 'cement' themselves in place. After it is securely attached the young barnacle undergoes metamorphosis (change) and loses the 2 shells and its eyes, and develops cirripeds, (curled, feathery legs) and a new shell covering of calcium carbonate. Wherever the rock barnacle attaches itself it stays the rest of its life. This interesting little marine animal is fascinating to watch in its permanent home especially when it's covered with water and is waving its feathery legs to gather food. Watch them the next time you go to the shore.

CENTER HOURS: Due to the heavy schedule of conducting school classes during May and June, the Center staff is unable to keep the museum open during school hours. The building will be open from 3:00 to 5:00 P.M. on weekdays and from 1:00 to 5:00 P.M. on Saturdays. We will be closed on Sundays.

ATTRACTING HUMMINGBIRDS

by *MARTHA CAPIZZANO*



The remarkable little ruby-throated hummingbird found in the eastern United States is one of the smallest and most interesting of birds. About $3\frac{1}{2}$ inches long, it weighs only one-tenth of an ounce. Despite its size, this fearless phenomenon of nature has been known to attack any other bird (yes, even hawks) to defend its nesting territory.

While pulling weeds from my flower garden last summer, I personally experienced the boldness of a female ruby-throat that was a regular visitor. She hovered in the air about two feet from my face and stayed there until I lost the challenging right to be in her flower heaven!

The ability of the hummingbird to hover motionless is due to the very rapidly beating wings that sound like a low hum and appear like a blur on either side of its tiny body. This feat is not to be matched, however, by its flying speeds which have been clocked at 60 MPH. It is apparently their speed, agility, and small size that make hummingbirds safe from attacks by birds of prey.

Sometimes mistaken as a large insect, the hummingbird is an iridescent green with darker greyish-green on the tail and wings and very light green to white on its breast. The male has a glowing red bib which the female lacks. Its bill is like a needle over 1" long.

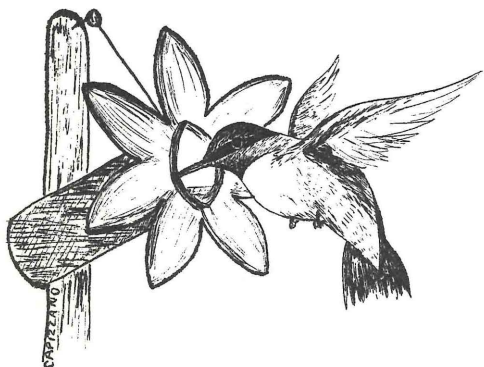
If you have a garden, hummingbirds are easy to attract. Red, orange, and other bright colored flowers, especially funnel- or tube-shaped ones, usually lure hummingbirds. Favorites include the quince, azalea, honeysuckle, red salvia, petunia, and columbine. Flowering vines such as cardinal climber, cleome, and trumpet creeper are also excellent.

Besides the nectar and small insects offered by flowers, a supplemental supply of sugar and water can be placed in a vial such as a small prescription bottle. A mixture that is too rich may be harmful, so a solution of 9 parts water to 1 of sugar is recommended. Honey should not be used since it may ferment, and honey also produces a bacteria that can be fatal.

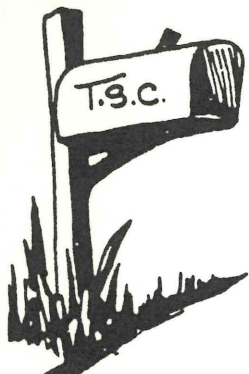
To attract the birds, put red food coloring in the water or wrap the bottle with red ribbon. I've found that an artificial flower made from heavy plastic or vinyl is best because it is weatherproof. Cut a circle 4" in diameter and in the middle draw a circle the size of the bottle used. Shape the circle into a flower and cut slashes in the center slightly smaller than the circle drawn. The bottom of the bottle can then be tightly squeezed through the slashed area. Press the petals back to maintain the flower's shape.

Once hummingbirds have discovered this "goldmine" keep a supply of sugar water on hand in the refrigerator.

Your effort will be rewarded by many hours of observing these tiny birds zip about your yard.



ARTICLES OF ADULT INTEREST



We welcome notice of Conservation activities or problems for inclusion in this section of the Naturalist's Notebook Please let us know of your local activity so that others may be aware of your efforts and lend their support where possible

THE BIG DAY: This annual Big Day birding trip is run by the Center during the weekend which is generally considered to be the height of the spring migration. The goal is to find as many different kinds of birds as possible in one day. This year the trip will be held on May 16th. Bob Dewire will be the leader and will be at the following locations at approximately the following times:

- 6:00 A.M. Arboretum (main entrance)
- 9:00 A.M. Mitchell's Woods (Ocean Ave. Entrance)
- 10:00 A.M. Harkness Park (parking lot)
- 12:45 P.M. Napatree Point (Watch Hill parking lot)
- 3:00 P.M. Barn Island (State Boat Landing)
- 6:00 P.M. Peace Sanctuary (Further location will depend on birds needed.)

People may meet us at any of the locations above if they do not want to spend all day. Fifteen minutes either side of the given hour should be allowed, however. Persons going all day should pack a lunch. Last year 103 species were recorded.

SUMMER DAY CAMP: The Science Center will again be conducting its summer day camp for children in Grades 1 through 6. A complete descriptive brochure has been sent to each member and others wishing one may get it from the Center.

BIRD CLUB TRIPS: The New London County Bird Club will hold the following walks in May:

May 2	7:00 A. M.	Bluff Point
May 6	7:00 A. M.	Harkness Park
May 9	6:30 A. M.	Arboretum followed by Harkness Park
May 13	7:00 A. M.	Stonington Picnic Area
May 20	7:00 A. M.	Assekonk Swamp
May 23	6:30 A. M.	Lake-of-Isles Scout Reservation, Ledyard, and the home of Mr. & Mrs. Frank Eastman
May 27	7:00 A. M.	Arboretum

FRIENDS OF THE CENTER: The list of members becoming Friends of the Science Center continues to grow. Added to the list this month were Mrs. Leon Bascom and Mrs. Philip Dewire.

WHATZITS: The Science Center still has some of the Hartford Electric Light Company's brochure entitled "Whatzits - A Guide to Connecticut's Seashore Treasure Trove". It shows and comments on a number of the interesting things to be found along our beaches. Anyone wishing to obtain one of these brochures may pick one up at the Center.

TERN SIGHTINGS: Those of you who attended our Annual Dinner in January remember the excellent speakers we had on the studies on terns at Great Gull Island. They have asked that people in this area watch for terns that have color bands on their legs. If any are seen, please contact the Center (443-4295) and tell us where and when the birds were seen, the band colors, and what the birds were doing (sitting, fishing, etc.).

“ABANDONED” Animal Babies

by Mike Walker

The return of Spring, although always welcome, also brings back one of the most vexing problems that conservationists have to face. Each year numbers of people, most of them well meaning, pick up scores of supposedly abandoned baby animals. Many of these are taken to peoples' homes, where most of them meet an early death because the care and feeding of young wild animals are extremely difficult problems. Others are taken to nature centers, local zoos, or conservation agencies because of the misguided notion that such places should naturally welcome them.

The pathetic irony is that in almost all cases, the young animals, supposedly the objects of compassion, suffer and die. This need not be so.

The great majority of "abandoned" baby animals are not lost at all. They are merely separated temporarily from the parent animal. The adults may leave the young to forage or hunt for food. Even if the parents are nearby they are almost always frightened by the approach of people and they seek shelter, leaving the babies open to discovery.



If the babies are too young to leave the nest and the nest site is destroyed, the adults will usually relocate the young if they are given a chance to do this free from human interference.

Even in those rare cases where parent animals have been killed or some other circumstance has resulted in the actual abandonment of the babies, it is generally better to leave them undisturbed. This is difficult for many of us to accept. It seems harsh and cruel, but it is not. In Nature, nothing dies or is destroyed that does not find its way into the unending ecological cycles that keep the natural world in balance.

Even if the problems of feeding and rearing the abandoned animal are overcome, further difficulties are in store for the human rescuer. As the great artist-naturalist Ernest Thompson Seton repeatedly observed, wild animals that are drawn into the human world almost invariably meet a violent end. Cute baby animals mature into creatures that have no place among the things of man. The half-grown skunk, raccoon, or squirrel cannot be domesticated of course, and becomes a serious problem. Worse, because of his fearlessness he is ill suited to return to the natural world.

Finally in addition to all these arguments, it is quite clearly against the law in Connecticut to possess wild birds or wild fur-bearing mammals without a special permit. These permits, obtained from the State are rarely given to individuals.

This Spring, let these points be the only considerations.

FIELD NOTES

MARCH 15 - APRIL 15

This is always an exciting time of year as new signs of spring are found everywhere. Early arriving PHOEBES and TREE SWALLOWS ran into some trouble when the sudden snowfalls around Easter, along with temperatures in the 20's, all but wiped out the insects they so badly needed. A number of these birds may not have survived that week. The storm also piled up the migrating FOX SPARROWS; feeders in the area were deluged with these birds. At Mumford Cove 196 of these sparrows were banded in 8 hours.

Lyme and Saybrook: GREATER YELLOWLEGS were first noted in the Blackhall River on March 27th, and a CHIPPING SPARROW was at Smith's Neck on April 12th. In South Cove, Saybrook there were over 25 RUDDY DUCKS on April 12th. In East Haddam the only reports of EVENING GROSBEAKS and COMMON REDPOLLS - one of each- came from Dolbia Farm.

East Lyme and Niantic: The first OSPREYS arrived at Black Point on March 24th and a pair have built a nest on a pole at Rocky Neck. The pole's location is very poor and unless strict measures are taken the birds' attempt to nest will surely fail before the hordes of summer vacationers at the park. The first TREE SWALLOWS showed up at Gorton's Pond on March 26th where up to 25 RING-NECKED DUCKS have been. A BARN SWALLOW was at Rocky Neck on April 12th.

Waterford and New London: The first SNAKE of the season, probably a GARTER SNAKE, was observed in a rather spectacular way on the early date of March 16th when a RED-TAILED HAWK was seen plunging into a field and then coming up with its writhing prey. A second GARTER

SNAKE was found in the Arboretum on April 8th. WOOD FROGS and SPRING PEEPERS were calling on March 23rd at the Arboretum. The first PHOEBE arrived in Montville on March 28th. Two DICKCISSELS were at a feeder on Dimmock Road in Waterford on March 29th and the last TREE SPARROWS were reported on April 13th. A SHORT-EARED OWL was at Harkness State Park on the 24th.

Groton, Mystic and Stonington: The first ROBIN heard singing its full song was on March 27th. Other spring arrivals included COMMON EGRET in Mystic on March 25th, SNOWY EGRET at Quambaug Cove on March 28th, OSPREYS at Wilcox Curve on March 23rd and at Trumbull Airport on the 28th, GREATER YELLOWLEGS at Barn Island on the 27th, a PHOEBE in Ledyard on the 28th, a YELLOW-BELLIED SAPSUCKER in the Stonington Picnic Area on April 8th, BLUE-WINGED TEAL at Barn Island on the 13th, and a very early BARN SWALLOW at Wamphassuc Point on the 3rd. Two DICKCISSELS have been coming to a feeder in Stonington. A WHITE-CROWNED SPARROW was captured in a banding trap at Mumford Cove on March 30th. At least a dozen WOODCOCK have been performing in a single field in North Stonington.

Rhode Island Shoreline: The New London County Bird Club's first walk on April 4th along the Rhode Island shore proved to be most rewarding with early SEMIPALMATED SANDPIPERS and PECTORAL SANDPIPERS found at Quonochontaug and Weekapaug respectively, a PIGEON HAWK at Moonstone Beach and, what has to be the top bird of the period, a LOUISIANA HERON at Weekapaug. At Napatree Point, the BRANT flock numbered 150, a SHORT-EARED OWL was seen on March 21st and PIPING PLOVERS arrived there on the 28th.

Contributors to this column were: Mr. & Mrs. Kenneth Bates, Grace Bissell, William Booth, Lawrence Brooks, Martha Capizzano, Jim Clark, Bob & Mary Jean Dewire, Kay Eastman, Phyllis Folsom, Helen Gilman, Richard Goodwin, Audrey King, Mrs. Charles King, Sam Knox, Mary Laffargue, Margaret MacGregor, Walter Moran, Trudy Smith, Mike Walker, and William Willets.

The Thames Science Center Presents Its Second Annual *NATURE FESTIVAL*

Saturday, June 20 9:30 to 12:30; 1:30 to 4:30

Sunday, June 21 2:00 to 5:00

*Spend the weekend with us
enjoying the out-of-doors in
the Connecticut Arboretum.*

*Field Trips
Demonstrations
Tours
Exhibits
Children's Programs*

*Watch for a Special Brochure
coming to you soon with more details.*

*In the meantime, be sure and reserve these
two dates in June- - - - -*

*Volunteer help is needed for tickets and serving refreshments.
Interested persons are asked to call the Science Center.

ACTIVITIES FOR MAY

- May 16 ... All Day THE BIG DAY. See page 10 for details.
- May 17 ... 2:00 P.M. A field trip to, the home of Mr. & Mrs. Sidney Hatchell. This area, called "Hidden Acres" has one of the most beautiful wildflower gardens there is. Meet at the Hatchell's located off Route 184 in Mystic.
- May 20 ... 6:30 P.M. Harkness State Park. Our first evening field trip of the season. Meet at the parking lot.
- May 23 ... 10:00 A.M. A Junior Workshop for members in Grades 1, 2, and 3. "Making Hummingbird Feeders". Limit 10 children. Advance registration required.
- May 27 ... 6:30 P.M. Barn Island. An evening trip to the marsh. Meet at the state boat landing.

See page 11 for a listing of the spring migration bird walks to be conducted by the New London County Bird Club.

We Need Your Active Membership and Support

THAMES SCIENCE CENTER

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NATURALIST NOTEBOOK

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THAMES SCIENCE CENTER

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MICHAEL WALKER — *Curator*

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ROBERT DEWIRE
Editor

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Flowering Dogwood

Photo by R. Dewire